Hybrid Vee-Hull / Wing-In-Ground Effect Vessel

Abstract

An improved planing hull which incorporates a vee-bow (1) with outboard chines (2) designed to trap air and water between said chines. As the chines (2) extend aft they become wider and deeper (3) in the water. The vee-bow (1) ensures comfort in a seaway by deflecting waves down and outward and prohibits the bow from being buried in a wave. The outboard chines (2) can house engines and waterjets while providing buoyancy aft to match the displacement of the machinery. The chines (2) can be designed to cancel each other's wake, reducing drag and increasing lift on the hull. The resulting vessel can have much greater beam and interior accommodation with the same displacement as a typical planing boat. The hybrid hull has improved wave handling, significantly improved transverse stability, a smoother ride, and notably less draft over convention vee-hull boats.